

The public, animal production diseases and policy; what lessons can be learnt from consumer research?

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Why public perceptions matter

- The sustainability of a production systems also includes how acceptable they are to stakeholders, including the public
- The public are becoming more concerned about how the food they eat is produced
- However, they are also becoming less familiar with modern food production
- A greater understanding of societal expectations can lead to greater trust



Systematic reviews

- Two separate systematic reviews were conducted:
 - Willingness-to-pay (WTP) meta-analysis (n=54)
 - Attitudes narrative review (n=80)
- Protocols were published online prior to reviews commencing
- Four databases were searched for each review using a combination of pre-specified key words
- Results were screened in a two stage process

Meta-analysis results

- A research gap was identified in relation to interventions to address production diseases
- A small, positive premium was found for higher welfare products. This varied by subgroup;
 - Western and Southern Europe had a higher WTP than Northern Europe and the UK
 - Highest for beef cattle, dairy cattle and layer hens and lowest for pigs
 - –Consumers had a higher WTP than citizens (both were positive)

Thematic analysis results

- Again a research gap was identified in relation to attitudes towards production diseases
- Consumers mostly view modern production systems negatively and voice a number of concerns
 - -Naturalness and humane treatment were central to this
- The majority of concerns were also motivated by human health
 - -e.g. the use of antibiotics was associated with food safety
- Sociodemographic characteristics were again important

Thematic analysis results

- Consumers have a number of coping mechanisms to enable them to eat meat
 - A number of barriers to purchasing higher welfare products were identified
- Consumers associated higher welfare/ animal friendly products with improved product quality, safety and healthiness



 Both reviews support the use of legislative and market based solutions for improving farm animal welfare

European Consumer Survey

- 2,330 were collected across the 5 countries and 3 survey versions
- Questions were asked in relation to a range of topics
- Descriptive statistics were obtained and Kruskal-Wallis ANOVA used to establish cross-country differences
- Exploratory factor analysis and structural equation modelling was used to explore the relationship between latent variables

Results

- The majority of participants were unfamiliar with modern farming methods
- Animal production systems with a greater level of intensification were not viewed favourably
- All stakeholders were perceived as responsible







Results

- The greatest concerns were related to antibiotic usage and resistance and food safety
- In relation to the disease mitigation strategies presented:
 - Doing nothing was consistently disagreed with
 - More proactive interventions were the most preferred, such as those to do with housing and enhanced hygiene
 - Those that involved medicines, vaccination and feed supplementation were least preferred

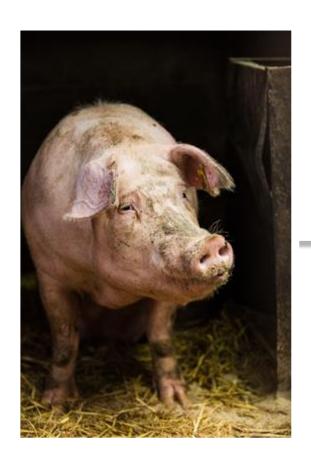
Conclusions

- The public have very little knowledge about modern production systems
 - Including where the products they eat come from
- Natural and proactive interventions are preferred
- The use of more reactive and "treatment-based" interventions were viewed as less acceptable.
 - Reassurances should be provided when used

Conclusions continued

- Stakeholders need to be more proactive in terms of the information they are providing to the public.
 - This may help with miscommunication and increased trust
- Case studies/ practice changes that would create public good will should be identified and communicated
- Independent assurance is important and stakeholders should be identified who could carry out this role.
 - Greater communication of existing relationships





Thank you!

Any questions?









Further reading

- Clark, B., Stewart, G.B., Panzone, L.A., Kyriazakis, I. and Frewer, L.J. (2017). Citizens, consumers and farm animal welfare: A meta-analysis of willingness-to-pay studies. *Food Policy*, 5, 68, pp.112-127.
- Clark, B., Frewer, L.J., Panzone, L.A. and Stewart, G.B., (2017). The Need for Formal Evidence Synthesis in Food Policy: A Case Study of Willingness-to-Pay. *Animals*, 7(3), p.23.
- Clark B, Stewart GB, Panzone LA, Kyriazakis I, Frewer LJ. (2016). A systematic review of public attitudes, perceptions and behaviours towards production diseases associated with farm animal welfare. *Journal of Agricultural & Environmental Ethics*, 29(3), pp.455-478.
- Clark, B., Stewart, G.B., Panzone, L.A. & Frewer, L.J. (2014a). A protocol for a systematic review into consumers' attitudes, beliefs and perceived ethical obligations towards farm animal welfare. *PeerJ PrePrints* 2:e676v1 http://dx.doi.org/10.7287/peerj.preprints.676v1
- Clark, B., Stewart, G.S., Panzone, L.A. & Frewer, L.J. (2014b). A protocol for a meta-analysis of consumers' and citizens willingness-to-pay for farm animal welfare and disease prevention. *PeerJ PrePrints* 2:e675v1 http://dx.doi.org/10.7287/peerj.preprints.675v1